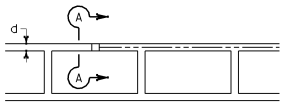
DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO.	TOTAL SHEETS

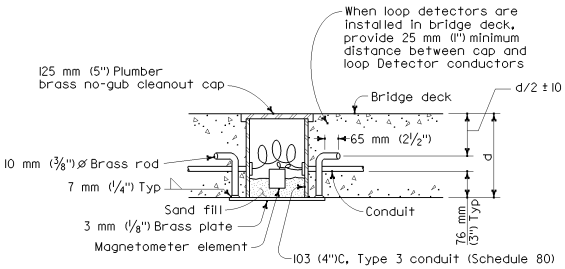
Theresa Gabriel
REGISTERED ELECTRICAL ENGINEER

July 1, 2002
PLANS APPROVAL DATE

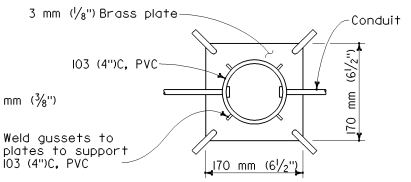
Theresa A. Gabriel, No. E15129, Exp. 6-30-04, ELECTRICAL, REGISTERED PROFESSIONAL ENGINEER, STATE OF CALIFORNIA



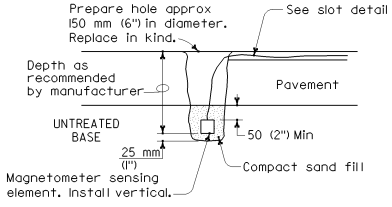
INSTALLATION DETAIL IN BRIDGE DECK



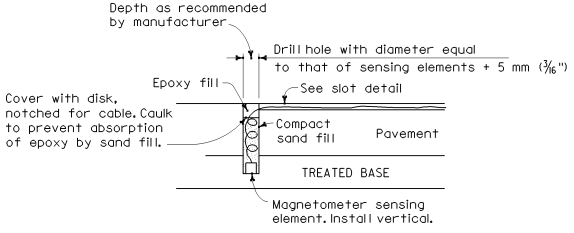
SECTION A-A



DETECTOR INSTALLATION IN BRIDGE DECK

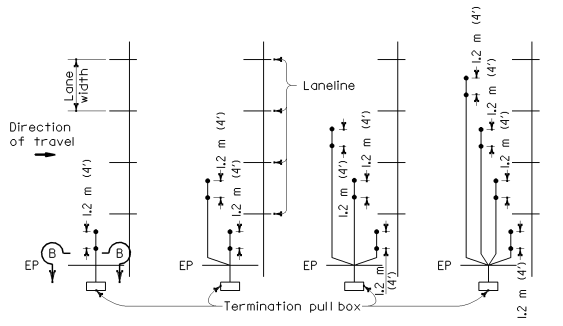


LIGHT DUTY ROADWAY
(With untreated base)



HEAVY DUTY ROADWAY
(With treated base)

MAGNETOMETER SENSING ELEMENT INSTALLATION DETAILS

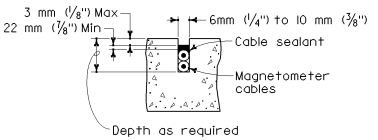


LAYOUTS AND DIMENSIONS

MAGNETOMETER DETECTOR INSTALLATION PROCEDURE

1. Prepare holes for sensing elements and saw slots in pavement for magnetometer cables as shown in details. Slots shall be washed until cleaned. Blow out and dry thoroughly with compressed air.
2. Install termination pull box. See termination details.
3. Install heads in holes and install cables in slots using 5 mm (3/16") to 6 mm (1/4") wood paddle and run to adjacent pull box allowing 1.5 m (5') of slack at the pull box. Hold cables with wood paddles at the bottom of the sawed slot during sealant placement.
4. Identify cables by lane or sensor unit designation.
5. Splice magnetometer cables to lead-in-cables. All splices shall be soldered using rosin core solder.
6. Test each sensing element circuit at controller or count station cabinet before filling holes and slots. Excitation circuits shall have a resistance of 50 Ω* per head and detection circuits shall have a resistance of 300 Ω* per head. Measurements shall be made with a low range ohmmeter.
7. Fill slots and sensing element holes as shown in details.
8. Lead-in-cable shall not be spliced between the termination pull box and the controller cabinet terminals.
9. See Standard Plan ES-5E for curb termination details.

*Or other resistance per manufacturer's specifications



SECTION B-B

SLOT DETAIL

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

SIGNAL, LIGHTING AND ELECTRICAL SYSTEMS
DETECTORS

These "Standard Plans for Construction of Local Streets and Roads" contain units in two systems of measurement: International System of Units (SI or "metric") and United States Standard Measures shown in the parentheses ( ). The measurements expressed in the two systems are not necessarily equal or interchangeable. See the "Foreword" at the beginning of this publication.

NO SCALE

ES-5D